

**SYSTEM AND METHOD FOR PERSONAL SITES**

**Background of the Invention**

An employee of a particular company often has information that they provide, information that they access, and information regarding the employee all kept by the company in the course of business. For example, the company may provide a web page that the public or other employees of the company may access to learn more information about another employee. The company may also provide a company page or site that all employees may access to receive updates and other company generated notices. Another site may be provided by the company for the storage and retrieval of documents created by an employee or other company groups. The number of sites that an employee must access for all the necessary information that they need in work day may increase greatly. Groups to which the employee belongs may create their own pages with information directed to that group. The employee may also need to access information from outside sources, such as stock tracking sites or other information. The information accessed by employees within a company setting can therefore be vast, with some information directed to a particular employee and other information directed to the company or public at large.

**Summary of the Invention**

The present invention is directed towards providing a system and method for personal sites. The personal sites are associated with a single Uniform Resource Locator (URL). A personal site may contain information that is useful to both the web page owner and other groups of users. In addition, a personal site may contain information that is pushed to the user by organizations to which the user belongs, as well as information that the user personally selects. According to one aspect of the present invention, the personal site may have two or more homepages or views instead of one: one homepage for the web page owner and other homepages directed at other specific users. The present invention allows a web page owner to control access to

multiple web pages from a single URL, thereby allowing different groups to have different views of the owner's content. In one embodiment, a web server redirects users to different web pages by analyzing identifiers associated with each web page query. Navigating to the personal site using identifiers allows organizations to have different  
5 personal site hosts, and also facilitates geographically distributed organizations with access to the personal sites outside of a single local area network.

The web server acts as a portal provider for each person accessing the web sites. Each person using the portal has the ability to have a personal web site to access, store, and organize their own information. In one embodiment, the personal  
10 web site is organized with personal content and lockdown content. In the company setting, the lockdown content allows the company to target information specifically to an employee. The web page acting as the portal for the employee ensures that the employee needs only one place to access information from multiple disparate sources. Since each person has a web site that stores their information, the information is  
15 accessible from any machine that has a browser. In one embodiment, the location of each person's personal site may be stored in a central directory or data store, allowing for automatic connection to the personal site from multiple machines. The content that may be accessed includes targeted information, their documents and lists, any web pages that they have created, and other information. The information corresponding to  
20 the personal site may contain information that is useful to both the person itself and others. Multiple views of the personal site are therefore provided for the various groups or individuals accessing the site. The multiple but connected sites allow an owner looking at the site to see a view that contains information that is targeted to him or her, while showing everyone else a view that is optimized show information about  
25 the person.

### **Brief Description of the Drawings**

FIGURE 1 illustrates an exemplary computing device that may be used according to exemplary embodiments of the present invention;

FIGURE 2 illustrates an exemplary portal homepage that allows a user to generate a personal site;

FIGURE 3 illustrates a flow diagram for an exemplary process for generating a personal site;

5                   FIGURE 4 illustrates an exemplary private view of a personal site;

FIGURE 5 illustrates a flow diagram for an exemplary process for designating a personal site as belonging to a particular user;

FIGURE 6 illustrates an exemplary public view of a personal site as viewed by the personal site owner;

10                   FIGURE 7 illustrates an exemplary public view of a personal site as viewed by users other than the personal site;

FIGURE 8 illustrates a block diagram of an exemplary system for storing and accessing personal sites; and

15                   FIGURE 9 illustrates a flow diagram for an exemplary process for navigating to a personal site, in accordance with the present invention.

### **Detailed Description of the Preferred Embodiment**

Generally, the present invention is directed towards providing a system and method for providing personal sites. The personal sites are automatically created from a portal. Until now, all that was allowed from either employee or public portals was a page or multiple pages that could be personalized. The invention recognizes that what is interesting in the site to its owner is quite different from the information that is interesting to everyone else. The invention allows for the two homepages to be accessed from the same URL depending on the user's relationship to the site. The applicability of the present invention extends to any site so that the “insiders” of the site have a different view than “outsiders” of the site – be it an employee portal, a divisional portal, a team portal, or other portal type. The invention provides the ability to have multiple homepages if different groups of people are identified by the site, allowing for optimized views of the site.

20

25

### Illustrative Operating Environment

With reference to FIGURE 1, one exemplary system for implementing the invention includes a computing device, such as computing device 100. Computing device may be configured as a client, a server, mobile device, or any other computing device that interacts with targeted content in a network based target content system. In a very basic configuration, computing device 100 typically includes at least one processing unit 102 and system memory 104. Depending on the exact configuration and type of computing device, system memory 104 may be volatile (such as RAM), non-volatile (such as ROM, flash memory, etc.) or some combination of the two. System memory 104 typically includes an operating system 105, one or more applications 106, and may include program data 107. In one embodiment, application 106 includes a content targeting application 120. This basic configuration is illustrated in FIGURE 1 by those components within dashed line 108.

Computing device 100 may have additional features or functionality. For example, computing device 100 may also include additional data storage devices (removable and/or non-removable) such as, for example, magnetic disks, optical disks, or tape. Such additional storage is illustrated in FIGURE 1 by removable storage 109 and non-removable storage 110. Computer storage media may include volatile and nonvolatile, removable and non-removable media implemented in any method or technology for storage of information, such as computer readable instructions, data structures, program modules, or other data. System memory 104, removable storage 109 and non-removable storage 110 are all examples of computer storage media. Computer storage media includes, but is not limited to, RAM, ROM, EEPROM, flash memory or other memory technology, CD-ROM, digital versatile disks (DVD) or other optical storage, magnetic cassettes, magnetic tape, magnetic disk storage or other magnetic storage devices, or any other medium which can be used to store the desired information and which can be accessed by computing device 100. Any such computer storage media may be part of device 100. Computing device 100 may also have input device(s) 112 such as keyboard, mouse, pen, voice input device, touch input device, etc. Output device(s) 114 such as a display, speakers, printer, etc. may also be included.

Computing device 100 also contains communication connections 116 that allow the device to communicate with other computing devices 118, such as over a network. Communication connection 116 is one example of communication media. Communication media may typically be embodied by computer readable instructions, data structures, program modules, or other data in a modulated data signal, such as a carrier wave or other transport mechanism, and includes any information delivery media. The term "modulated data signal" means a signal that has one or more of its characteristics set or changed in such a manner as to encode information in the signal. By way of example, and not limitation, communication media includes wired media such as a wired network or direct-wired connection, and wireless media such as acoustic, RF, infrared and other wireless media. The term computer readable media as used herein includes both storage media and communication media.

#### Illustrative Personal Site System

FIGURE 2 illustrates an exemplary portal homepage that allows a user to generate a personal site in accordance with the present invention. The portal homepage is the default site that is shown to a user before the user has customized the content for their own personal site or "mypage", or as a general access site to the functions of the portal server. The portal homepage or a similar page may include an option to create a personal site if one has not yet been created. Similarly, if a user has already created a personal site, the portal homepage may include a link for the user to navigate to their personal site from the portal homepage. The portal homepage shown is related to the SHAREPOINT® Portal Server software suite produced by Microsoft Corporation of Redmond, Washington and is provided by way of example only.

FIGURE 3 illustrates a flow diagram for an exemplary process for generating a personal site in accordance with the present invention. Process 300 begins at start block where a user has selected to generate a personal site. Processing continues at decision block 302.

At decision block 302, a determination is made whether the user accessing the portal has permission for a personal site. It may be that certain

organizations decide that only certain members are able to have personal sites. The remaining members are then allowed access to information through the portal through a default portal site. In one embodiment, a profile associated with the user is stored in relation to the portal. The profile is checked to determine whether the user does have  
5 permission for a personal site. If the user does not have permission to have a personal site, processing moves to block 304. In contrast, if the user does have permission to have a personal site, processing continues at decision block 306.

At block 304, the user is shown an error message (e.g., "Access Denied") since the user did not have permission for a personal site. In another embodiment, a  
10 user that does not have permission for generating a personal site, is not even shown a link for generating a personal site. In still a further embodiment, the user may be redirected to a general portal site. The general portal site may be configured similarly to the general portal site shown in FIGURE 2. Once the user is shown the error message, processing ends.

15 At decision block 306, a determination is made whether a personal site already exists for the particular user. The user is first identified and then the user's profile, if one exists, is examined to determine whether a personal exists for the user. If a personal site does exist for the user, processing moves to block 308. In contrast, if the a personal site does not exist for the user, processing advances to block 310.

20 At block 308, the user is redirected to their existing personal site since their personal site already exists. In one embodiment, a user is restricted from generating any additional sites on the portal server other than their personal site. In another embodiment, a user is allowed to generate other collaborative sites for groups or other organizations outside their own personal site. In either case, if a site exists that is  
25 associated with the user, the user is automatically or may selectively be navigated to the associated site rather than having a new site generated. Once the user is redirected to their personal site, processing ends.

At block 310, a personal site provisioning code is called to generate a new personal site for the user since it has already been decided that the user has  
30 permission to have a personal site, but does not yet have a personal site. Calling the

personal site provisioning code initiates the process for generating the personal site for the user. Processing continues at block 312.

At block 312, the personal site is generated for the user. The personal site provisioning code invokes a site creation API that is used in generating the personal site. In one embodiment, the required properties for initiating the personal site are provided from the user's profiles stored on the portal server. In another embodiment, the user is shown a "work in progress" page while the site creation is taking place. Processing continues at block 314.

At block 314, the user is redirected to the personal site that now provides the functionality of a personal home page for the user. At this point, the user has a fully formed web site that is substantially under his or her administrative control. The site may then be customized according to the user's preferences for content and data storage. The site may also contain administrative information that is outside the user's control (e.g., corporate news). Once the user is navigated to their customizable personal page, the initial site generation process advances to an end block, where process 300 ends.

FIGURE 4 illustrates an exemplary private view of a personal site in accordance with the present invention. Personal site 400 shown includes title 402, address 404, selected view 406, selectable actions 408, selectable lists 410, selectable pages 412, calendar 414, news 416, links summary 418, other links 420, and alerts summary 422. Various other embodiments may include other sections, more sections, or fewer sections than those shown. A link within the page may be provided to edit the contents of the page, such as the "modify my page" link 424 shown. Other contents of personal site 400 may include other sections, such as a section that shows a view of the user's inbox associated with their e-mail service.

In the example shown, the personal site is shown in a webpage format corresponding to the format for WINDOWS INTERNET EXPLORER®, a web browser produced by Microsoft Corporation of Redmond, Washington. Title 402 shown in FIGURE 4 corresponds to the name of the user, but may correspond to any arbitrarily selected title of the user. Address 404 corresponds to the URL of personal site 400.

The URL corresponds to the private view of the personal site for this particular user and therefore includes a "default.aspx" designation. In the description of FIGURES 6 and 7 below, it may be seen that a different designation is shown for the public view of the personal site.

5                    Since personal site 400 is a launch point for the user's daily work related activities, personal site 400 operates as central place to list and manage the links to the things that the user needs to conduct work. There are various ways to customize the personal site 400 with documents and links once the process for designating personal site 400 as the storage location for documents, described in the discussion of FIGURE 5  
10 below.

                    The various sections of personal site 400 are each customizable by the user unless a section is designated as a "lockdown" section. A "lockdown" section refers to a section of the document that is reserved for the organizations use. For example, a company may want to keep employees apprised of certain updates. In this  
15 case, a section, such as news 416, may be a lockdown section or have a portion of the section locked so that the user cannot modify it. In this example, news 416 provides news that is targeted by the portal administrator or other organizations to the user, and accordingly news 416 is a lockdown section. If the section is a lockdown section of personal site 400, the user has limited or no ability to change the content of the section.  
20 In another embodiment, the lockdown function may be employed so that the employee cannot remove or move the update notices, giving the content pushed to the page by the company a higher likelihood that it will be viewed by the employee.

                    FIGURE 5 illustrates a flow diagram for an exemplary process for designating a personal site as belonging to a particular user in accordance with the  
25 present invention. Process 500 starts at a start block where a user has selected to designate a particular personal site as their personal site. The personal site may then be used as the default save location for documents and other resources. Processing continues at block 502.

                    At block 502, the code for setting the personal site as the default save  
30 location is initiated. In one embodiment, a script is run on the page that calls an



ActiveX<sup>®</sup> control. The script run in the browser defines an object (e.g., button) that is then utilized by ActiveX<sup>®</sup> on the client to initiate the default setting. If the personal site location is already designated for this user, the object is hidden and not displayed to the user. In other embodiments, other methods may be used to initiate the default setting.

5 Processing continues at block 504.

At block 504, the control runs a security check to make sure that the default save location command is authentic. A number of security checks may be run. For example, a prompt to the owner may be made to confirm whether to proceed. Also, the page that is calling the ActiveX<sup>®</sup> control may be checked to make sure that the page is considered a trusted source for the call. Another security check involves determining whether the URL of the page making the call is the same as a URL parameter of the script. The script should be run on the personal site of the owner. Accordingly, the URL of the script and the destination URL for saving documents should be the same. Once the security check is complete, processing moves to block 506.

15 At block 506, the personal site is set as the personal site for the particular user and may then be used for saving documents and other files generated on the chosen local machine. The ActiveX<sup>®</sup> control then writes a URL that was given to it by the script to a selected location within the registry.

At block 508, the directory system is updated with the location of the owner's personal site. In one embodiment, this step may be done at any time the owner visits their personal site. Updating the directory system allows the location of the user's personal site to be known on the network. Accordingly, when other users then search for the owner's personal site, the location is known on the directory system. After the directory system is updated, process 500 ends.

25 Process 500 allows the personal site to be designated as the user's personal site and allows the personal site to be set as the default save location for documents. Using the personal site as the default save location prevents the user from being forced to select the location of each document as they are composed in order to save the documents to the personal site.

FIGURE 6 illustrates an exemplary public view of a personal site as viewed by the personal site owner in accordance with the present invention. Personal site 600 shown includes title 602, address 604, selected view 606, selectable actions 608, selectable lists 610, selectable pages 612, shared site list 614, info section 616, shared links 618, and recent documents 620. Various other embodiments may include other sections, more sections, or fewer sections than those shown. Other contents of personal site 600 may include other sections that are associated with a public view of a personal site, such as additional pictures or other information.

In the example shown, the personal site is shown in a webpage format corresponding to the format for WINDOWS INTERNET EXPLORER®, a web browser produced by Microsoft Corporation of Redmond, Washington. Personal site 600 is similar to personal site 400 of FIGURE 4, except that certain sections and items of information have changed with the change from the private view to the public view. For example, address 604 of the personal site 600 includes the designation of "Public.aspx" to correspond to the public view. Also, since it is the public view, the calendar, inbox, and other personal sections have been removed. Info section 616 now replaces those sections to provide information about the personal site owner. Also, the links section is referred to as shared links 618. The shared links correspond to those links of the owner's that the owner has designated to share with the public. In one embodiment, the level of permissions for links, as well as for other documents, may be selected so that only certain users may view them when visiting the owner's personal site.

Since the owner is viewing the public view of personal site 600, selected view 606 is shown to allow the user to select between the public and the private view.

FIGURE 7 illustrates an exemplary public view of a personal site as viewed by users other than the personal site owner in accordance with the present invention. Personal site 700 shown includes title 702, address 704, selectable actions 706, shared lists 708, shared pages 710, shared site list 714, info section 716, shared links 718, and recent documents 720. Various other embodiments may include other sections, more sections, or fewer sections than those shown. Other contents of personal

site 600 may include other sections that are associated with a public view of a personal site, such as additional pictures or other information.

In the example shown, the personal site is shown in a webpage format corresponding to the format for WINDOWS INTERNET EXPLORER®, a web browser produced by

5 Microsoft Corporation of Redmond, Washington. Personal site 700 is similar to personal site 600 of FIGURE 6, except for certain actions and information. For example, since someone other than the owner is viewing the public view of personal site 700, a selected view section (see 606 of FIGURE 6) is no longer offered to the user. Since the user is not the owner, they are only allowed to view the public view of the  
10 owner's personal site. Also, certain actions available to the user have changed. For example, an option to edit the site is no longer offered, but the user is now offered the option of saving this site to their own stored links. In further embodiments, any number of sections or documents may be chosen to be added or removed between the public view and the private view of the personal site.

15 FIGURE 8 illustrates a block diagram of an exemplary system for storing and accessing personal sites in accordance with the present invention. The block diagram is meant to illustrate the difference between the public and the private aspects of a particular personal site. Personal site 802 includes associated data store 804, associated private view 806, and associated public view 808. Private view 806 and  
20 public view 808 each have an associated URL 810 to which a person is navigated depending on their identity with relation to the personal site.

Data store is available for storing the profile of the owner of personal site 802 as well as storing other information regarding personal site 802. Data store 804 may also be used for storing documents to the personal site as described in the  
25 discussion of FIGURE 5 above.

Accordingly, personal site 802 does not have an associated URL of its own, but instead has two views (806, 808) that have URLs associated with them. In another embodiment, personal site 802 includes more than a single public view, but instead includes multiple public view based on the identity of the user accessing  
30 personal site 802. A user navigating to personal site 802 is therefore directed to one of

these views. As described in the process of FIGURE 9 below, the user may automatically be navigated to one of the views depending on the user's identity with relation to the personal site.

FIGURE 9 illustrates a flow diagram for an exemplary process for  
5 navigating to a personal site, in accordance with the present invention. Process 900 begins at a start block where a user has entered a URL in an attempt to navigate to a particular personal site. Processing continues at block 902.

At block 902, the identity of the user is examined. The identity of the user may be determined by authenticating the user against the personal site to which the  
10 user is navigating. In one embodiment, the internet browser authenticates the user automatically before the server operates to navigate the user. Once the identity of the user is determined, that identity is passed to the server. Processing continues at block 904.

At block 904, the owner of the personal site to which the user is  
15 navigating is determined. A lookup of the owner of the personal site is made, which is stored in a property associated with the personal site. Examining the property, the identity of the owner for the personal site may be determined. Once the owner of the personal site is determined, processing continues at decision block 906.

At decision block 906, a determination is made whether the user  
20 navigating to the personal site and the owner of the personal site are the same. If the user and the owner are the same, processing continues at block 908. However, if the user and the owner are not the same, processing continues at block 910.

At block 908, the user is redirected to the private view of their personal site since it was determined that the user and the owner were the same. The server  
25 gives the internet browser a new URL so that the internet browser navigates the user to the new URL. In this case, the new URL corresponds to the private view of the personal site. Once the user arrives at the private view of the personal site, process 900 ends.

At block 910, the user is redirected to the public view of their personal  
30 site since it was determined that the user and the owner were not the same. The server

gives the internet browser a new URL so that the internet browser navigates the user to the new URL. In this case, the new URL corresponds to the public view of the personal site. In one embodiment, a string add is performed on the portal URL to include the portion of the URL relevant to this specific personal site. Stated differently, the URL to  
5 which the user is navigating is dynamically built prior to redirecting the user to the URL. Once the user arrives at the public view of the personal site, process 900 ends.

The above specification, examples and data provide a complete description of the manufacture and use of the composition of the invention. Since many embodiments of the invention can be made without departing from the spirit and scope  
10 of the invention, the invention resides in the claims hereinafter appended.